

REMARKS

Applicant respectfully submits that none of the changes in this preliminary amendment are made for reasons of patentability. Language in claim 1 has been amended to recite executable instruction code to be accessible by a first computer at the beginning of the first element rather than reciting a first computer having access to executable instruction code at the beginning of that element. Language in claim 1 and 2 has been amended to refer to a plurality of client computers rather than a single second computer. The word "client" is inserted in place of "second" simply to make claims 1 and 2 easier to read and for no other purpose. The reference to a "plurality" of client computers simply reflects that the system has the ability to stream data to more than one computer. Language in claim 14-16 has been amended to make the claims read better and to refer explicitly to providing executable instruction code in the second recited step. Language in claim 17 has been amended to make the last line of the claim clearer. Claims 20-29 are newly added to recite various aspects and combinations of the disclosed invention. No new matter has been added. Applicant respectfully requests that these amendments be allowed.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 499992000100. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: May 14, 2001

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE DETAILED DESCRIPTION:

On page 9 continuing on page 10, the paragraph beginning with "Computer 14-1 may be thought of as . ." is replaced with the following:

Computer 14-1 may be thought of as a "client" device. All that means in this context is that computer 14-1 may request and receive services from stream server 12 or slide server 13. Stream server 12 and client computer 14-1 are connected through wide area network 17; thus stream server 12 may be thought of as connected to a first side of wide area network 17 and client computer 14-1 may be thought of as connected to a second side of wide area network 17. In the illustrated presently preferred embodiment, stream server 12, voice server 16, moderator computer 15-1, slide server 13, and speaker computer 11-1 are all shown as being on the same side of wide area network 17. In other words, some connection paths run between these various devices unmediated by a wide area network (of course these connection paths are typically mediated by a local area network -- not separately illustrated). It will be appreciated by those skilled in the art that this need not necessarily be the case. For example, moderator console computer 15-1 might be connected to speaker console computer 11-1 and/or to slide server 13 via a wide area network connection.

IN THE CLAIMS:

1. (Once amended) A system for delivery of content over a wide area network to a plurality of client computers, the content being captured by the system over a time period of a live event, the system comprising:

executable instruction code in an electronically readable medium to be accessible to a
first computer [connected to a first side of the wide area network], the first computer having a
cache for storing at least one data stream [and the first computer having access to],the executable
instruction code in an electronically readable medium being for at least:

identifying a live portion of the at least one data stream [containing content captured by
the system], the live portion being that portion of the at least one data stream at the first computer
containing content captured more recently by the system than [the] content contained in any other
portion of the at least one data stream at the first computer currently available for sending from
the first computer to the plurality of client computers [a second computer, the second computer
being connected to a second side of the wide area network];

for an each respective one of the plurality of client computers, identifying a user position
portion of the at least one data stream, the user position portion of the at least one data stream
being that portion most recently sent from the first computer to the respective one of the plurality
of client [the second] computers;

receiving a first request at the first computer from a first any one of the plurality of client
[the second] computers;

in response to the first request, sending the live portion of the at least one data stream
from the first computer to the first any one of the plurality of client [second] computers;

receiving a second request at the first computer from the first any one of the plurality of
client [second] computers; and

in response to the second request, sending a portion of the at least one data stream from
the first computer to the first any one of the plurality of client [second] computers containing

content captured less recently by the system than content contained in the live portion of the at least one data stream;

wherein the first request and the second request may be sent from the first any one of the plurality of client [second] computers to the first computer and responded to by the first computer in alternating fashion during a time period that [at least] includes at least a portion of the time period of the live event as extended by a latency period of the wide area network.

2. (Once amended) The system of claim 1 wherein the executable instruction code in an electronically readable medium is also for at least:

receiving a third request at the first computer from the first any one of the plurality of client [second] computers;

in response to the third request, sending the at least one data stream from the first computer to the first any one of the plurality of client [second] computers beginning with a portion of the at least one data stream containing content captured less recently than the content contained in the live portion, and continuing with succeeding portions of the at least one data stream, each succeeding portion in sequence containing content more recently captured by the system; and

in response to the third request sending the at least one data stream from the first computer to the first any one of the plurality of client [second] computers at a content rate such that, after a period of time, the user position portion of the at least one data stream is the live portion, unless a request other than the third request is received at the first computer from the second computer after receipt of the third request at the first computer and before the user position portion is the live portion;

wherein the third request may be sent by the first any one of the plurality of client [second] computers to the first computer and responded to by the first computer during a time period that [at least] includes at least a portion of the time period of the live event as extended by a latency period of the wide area network.

3. The system of claim 2 wherein:

the at least one data stream includes a first data stream and a second data stream, the first and second data streams containing substantially the same content, the first data stream being a first sequence of audio samples and the second data stream being a second sequence of audio samples created at the first computer from the first sequence of audio samples, the content rate of the second sequence of audio samples when delivered at a first data rate being greater than the content rate of the first sequence of audio samples when delivered at the first data rate;

the at least one data stream sent in response to the first request includes the first data stream;

the at least one data stream sent in response to the third request includes the second data stream; and

the executable instruction code in an electronically readable medium is also for at least creating the second data stream from the first data stream.

4. The system of claim 1 or 2 wherein the at least one data stream includes a first sequence of video frames.

5. The system of claim 1 or 2 wherein the at least one data stream includes a first sequence of commands for directing the second computer to retrieve and present a sequence of slides.

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. A method of streaming a first data stream in a plurality of streaming modes supported at a first computer connected to a first side of a wide area network from the first computer to a second computer connected to a second side of the wide area network, the second computer having a media player program for presenting content of the data stream to a user at the second computer, a first mode of the media player program not changing in response to a change from a first of the plurality of streaming modes to a second of the plurality of streaming modes, the method comprising:

 sending executable instruction code in a carrier signal from the first computer to the second computer for invoking the first mode of the media player program and for presenting an on-screen interface allowing a user at the second computer to request in successive fashion at least the first and the second of the plurality of streaming modes supported at the first computer; in response to a request received at the first computer from a user at the second computer to change from the first of the plurality of streaming modes to the second of the plurality of streaming modes, associating time stamp values with data units of the first data stream such that the media player program at the second computer will present content of the first data stream in a manner providing the user at the second computer an experience of a mode change while the media player program remains in the first mode of the media player program.

12. The method of claim 11 wherein the first mode of the media player is a mode for playing in sequence data units having successively increasing time stamp values, the first mode of the plurality of streaming modes is a live mode, the second mode of the plurality of streaming modes

is a non-live mode having a first identifiable difference between an originally applied time stamp of a data unit to be next delivered from the first computer to the second computer and a time stamp corresponding to real time wherein the time stamp values of data units to be next delivered are changed from the originally applied time stamp to the time stamp corresponding to real time such that the second computer continues to receive data units that have successively increasing time stamp values when a mode change from the first of the plurality of streaming modes to the second of the plurality of streaming modes occurs.

13. The method of claim 11 wherein the first mode of the media player program is a mode for playing content at a first content rate, the first mode of the plurality of streaming modes is a mode for playing content at the first content rate, and the second mode of the plurality of streaming modes is a mode for playing content at a second content rate, the second content rate being faster than the first content rate, and wherein when streaming in the second of the plurality of modes, time stamps of data units sent to the second computer are adjusted such that a time value difference between the time stamps of a first data unit and a second data unit is less than the time value difference between the original time stamps applied to the first data unit and the second data unit so that the media player program, while remaining in a mode for playing content at the first content rate, plays content at the second content rate.

14. (Once amended) In a conferencing system [having] in which a plurality of computers are connected to a network, the system allowing a speaker to request at least in successive fashion display of a sequence of presentation slides on a speaker monitor connected to a speaker computer connected to the network and on a plurality of participant monitors each one of the plurality of participant monitors connected to a participant computer connected to the network, the participant computers having an interface for entering text of questions/comments and for

transmitting the questions/comments across the network, a method for handling the questions/comments comprising:

[interposing] providing a Q/A slide that may be interposed into the sequence of presentation slides such that the speaker requests display of the Q/A slide on the speaker monitor at a time in a presentation given by the speaker at which the speaker would like to view and respond to at least one of the questions/comments;

[sending] providing executable instruction code in a computer readable medium for at least receiving the text of the at least one of the questions/comments [to] at the speaker computer [; and

[on the speaker monitor merging] for merged display on the speaker monitor of the Q/A slide and [with display of] the text of the at least one of the questions/comments when the speaker requests display of the Q/A slide[on the speaker monitor].

15. (Once amended) The method of claim 14 further comprising providing executable instruction code also for at least:

selectively designating the Q/A slide public;
sending the Q/A slide to each of the participant computers;
only if the Q/A slide is designated public, sending the text of the at least one of the questions/comments to each of the participant computers for merged [; and
on each of the participant monitors, merging]display on each of the respective participant monitors of the Q/A slide and [with display of] the text of the at least one of the questions/comments when the speaker requests display of the Q/A slide.

16. (Once amended) The method of claim 14 further comprising providing executable instruction code also for at least:

prior to sending the text of the at least one of the questions/comments to the speaker computer, sending the text of the at least one of the questions/comments to a moderator computer, the moderator computer having an interface for a moderator at the moderator computer to view the at least one of the questions/comments and for the moderator to selectively indicate that the at least one of the questions/comments is to be sent to the speaker computer;

sending the at least one of the questions/comments to the speaker computer only if the moderator has indicated that the at least one of the questions/comments is to be sent to the speaker computer.

17. (Once amended) The method of claim 14 further comprising:

presenting an interface for the moderator to enter annotation text and selectively associate the annotation text with the at least one of the questions/comments;

sending the annotation text along with the at least one of the questions/comments to the speaker computer and displaying the annotation text on the speaker monitor so that the speaker may determine with which of the questions/comments the annotation text is associated.

18. A system for the delivery of content over a wide area network, the content being captured by the system over time, the system comprising:

means for receiving mode requests;

means for streaming at least one data stream in response to mode requests.

19. A system for web-conferencing comprising:

means for handling participant questions/comments.

20 (New) A system for handling phoned-in questions/comments from participants in a web conference, the system comprising:

first executable instruction code in an electronically readable medium to be accessible to a voice server computer, the voice server computer being connected to a telephone network for receiving voice data of a participant phone call and having a cache for storing the voice data, the first executable instruction code being for at least converting the voice data of the participant phone call into an audio clip for transmission to other computers and sending the audio clip to a moderator computer, the moderator computer having at least one user interface device;

second executable instruction code in an electronically readable medium to be accessible to the moderator computer, the second executable instruction code being for at least presenting to a moderator at the moderator computer an interface for playing the audio clip, entering an annotation, associating the annotation with the audio clip, and selectively sending the audio clip and associated annotation to a speaker computer, the speaker computer having at least one user interface device; and

third executable instruction code in an electronically readable medium to be accessible to the speaker computer for at least presenting to a speaker at the speaker computer an interface for selectively playing the audio clip and providing the content of the audio clip to an audio data stream and for sending the audio data stream to at least one other computer.

21. (New) A conferencing system in which content is delivered over a wide area network to a plurality of participant computers, the content being captured by the system over a time period of a live event, the system comprising:

first executable instruction code in an electronically readable medium to be accessible to a stream server computer, the stream server computer having a cache for storing at least one data stream containing content captured by the system, the first executable instruction code in an electronically readable medium being for at least, in response to a request by any respective one

of the plurality of participant computers, streaming the at least one data stream to the any respective one of the plurality of participant computers in any one of a plurality of streaming modes, the plurality of streaming modes including at least a live mode and a non-live mode; and second executable instruction code in an electronically readable medium to be accessible to a speaker computer, the second executable instruction code being for at least sending a data stream containing content captured at the speaker computer from the speaker computer to the stream server computer.

22. (New) The system of claim 21 further comprising:

third executable instruction code in an electronically readable medium to be accessible to a voice server computer, the voice server computer being connected to a telephone network for receiving voice data of a participant phone call and having a cache for storing the voice data, the fourth executable instruction code being for at least converting the voice data of the participant phone call into an audio clip for transmission to other computers and sending the audio clip to a moderator computer, the moderator computer having at least one user interface device; and

fourth executable instruction code in an electronically readable medium to be accessible to the moderator computer, the fourth executable instruction code being for at least presenting to a moderator at the moderator computer an interface for playing the audio clip, entering an annotation, associating the annotation with the audio clip, and selectively sending the audio clip and associated annotation to the speaker computer;

wherein the speaker computer has at least one user interface device and the second executable instruction code is also for at least presenting to a speaker at the speaker computer an interface for viewing the annotation, selectively playing the audio clip and providing the content of the audio clip to an audio stream to be sent to the stream server computer.

23. (New) The system of claim 21 further comprising:

third executable instruction code in an electronically readable medium to be accessible to a slide server computer connected to the speaker computer, the slide server computer having a cache for storing a plurality of slides, the third executable instruction code being for at least sending a one of the plurality of slides to a one of the plurality of participant computers in response to a request transmitted from the one of the plurality of participant computers, wherein the request may be triggered by a slide flip command originated at the speaker computer, the slide flip command referring to the one of a plurality of slides;

fourth executable instruction code in an electronically readable medium to be accessible to a moderator computer, the moderator computer having at least one user interface device, the fourth executable instruction code being for at least receiving question/comment text data originally sent from the participant computer and presenting to a moderator at the moderator computer an interface for reviewing and selectively indicating question/comment text data to be transmitted to the speaker computer.

24. (New) The system of claim 23 wherein the plurality of slides includes at least one Q/A slide, the fourth executable instruction code being also for at least sending the selectively indicated question/comment text data to the speaker computer in response to a slide flip command originated at the speaker computer referring to the Q/A slide and wherein the second executable instruction code is also for at least displaying on a speaker monitor connected to the speaker computer the question/comment text data sent from the moderator computer.

25. (New) The system of claim 21 wherein the plurality of streaming modes includes a catch-up mode.

26. (New) The system of claim 25 wherein the at least one data stream includes at least one audio stream and the first executable instruction code is also for at least streaming the at least one audio stream in the catch-up mode.

27. (New) A conferencing system in which content is delivered over a wide area network to a plurality of participant computers, the content being captured by the system over a time period of a live event, the system comprising:

first executable instruction code in an electronically readable medium to be accessible to a stream server computer, the stream server computer having a cache for storing at least one data stream containing content captured by the system, the first executable instruction code in an electronically readable medium being for at least, in response to a request by any respective one of the plurality of participant computers, streaming the at least one data stream to the any respective one of the plurality of participant computers in any one of a plurality of streaming modes, the plurality of streaming modes including at least a live mode and a non-live mode;

second executable instruction code in an electronically readable medium to be accessible to a speaker computer, the speaker computer having at least one user interface device, the second executable instruction code being for at least sending a data stream containing content captured at the speaker computer from the speaker computer to the stream server computer;

third executable instruction code in an electronically readable medium to be accessible to a voice server computer, the voice server computer being connected to a telephone network for receiving voice data of a participant phone call and having a cache for storing the voice data, the third executable instruction code being for at least converting the voice data of the participant phone call into an audio clip for transmission to other computers and sending the audio clip to a moderator computer, the moderator computer having at least one user interface device;

fourth executable instruction code in an electronically readable medium to be accessible to the moderator computer, the fourth executable instruction code being for at least presenting to a moderator at the moderator computer an interface for playing the audio clip, entering an annotation, associating the annotation with the audio clip, and selectively sending the audio clip and associated annotation to the speaker computer, wherein the second executable instruction code is also for at least presenting to a speaker at the speaker computer an interface for viewing the annotation, selectively playing the audio clip and providing the content of the audio clip to an audio stream to be sent to the stream server computer; and

fifth executable instruction code in an electronically readable medium to be accessible to a slide server computer, the slide server computer having a cache for storing a plurality of slides, the fifth executable instruction code being for at least sending a one of the plurality of slides to a one of the plurality of participant computers in response to a request transmitted from the one of the plurality of participant computers, wherein the request may be triggered by a slide flip command originated at the speaker computer, the slide flip command referring to the one of a plurality of slides;

wherein the fourth executable instruction code is also for at least receiving question/comment text data originally sent from a one of the plurality of participant computers and presenting to a moderator at the moderator computer an interface for reviewing and selectively indicating question/comment text data to be transmitted to the speaker computer;

and wherein the plurality of slides includes at least one Q/A slide, the fourth executable instruction code being also for at least sending selectively indicated question/comment text data to the speaker computer in response to a slide flip command originated at the speaker computer referring to the Q/A slide and wherein the second executable instruction code is also for at least

displaying on a speaker monitor connected to the speaker computer the text data containing the question or comment sent from the moderator computer.

28. (New) The system of claim 27 wherein the plurality of streaming modes includes a catch-up mode.

29. (New) The system of claim 28 wherein the at least one data stream includes at least one audio stream and the first executable instruction code is also for at least streaming the at least one audio stream in the catch-up mode.